

These represents moving parts of the bridge (that is added to the existing road and therefore becomes the road after the addition). As the mass goes forward, it presses on each of the moving parts that are coupled to a crankshaft, so that it is possible to create a rotation with a linear movement.

Figure 1 : Demonstration that linear movement can be translated into rotation

Moving parts of the Bridge

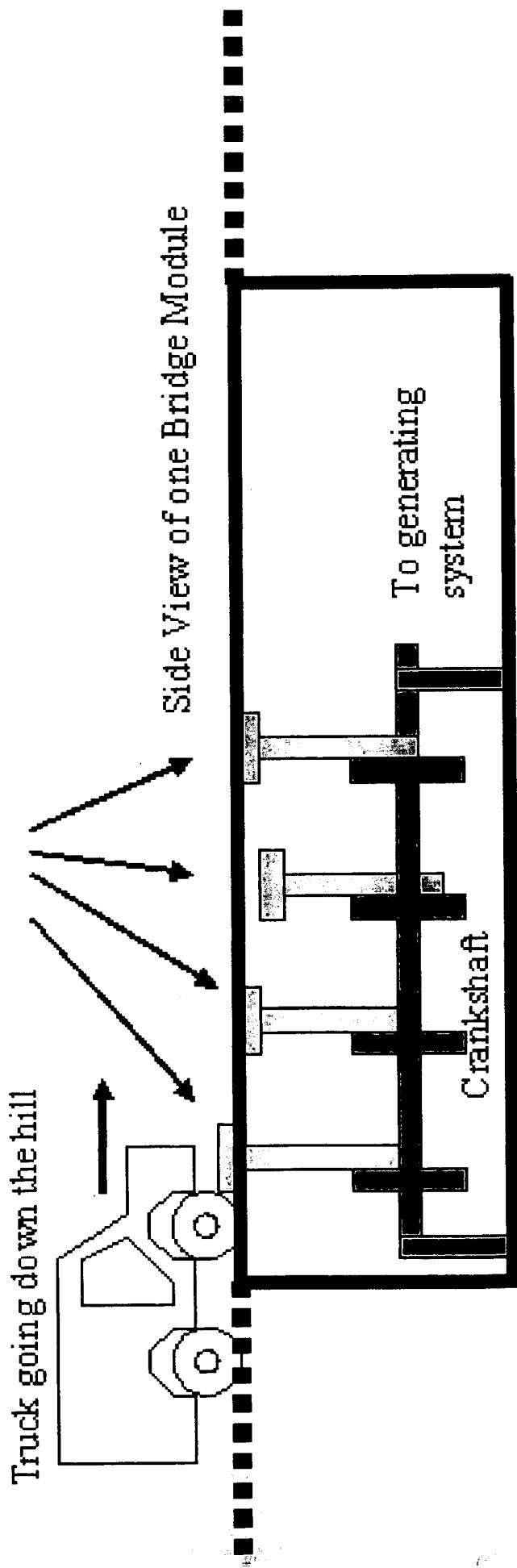
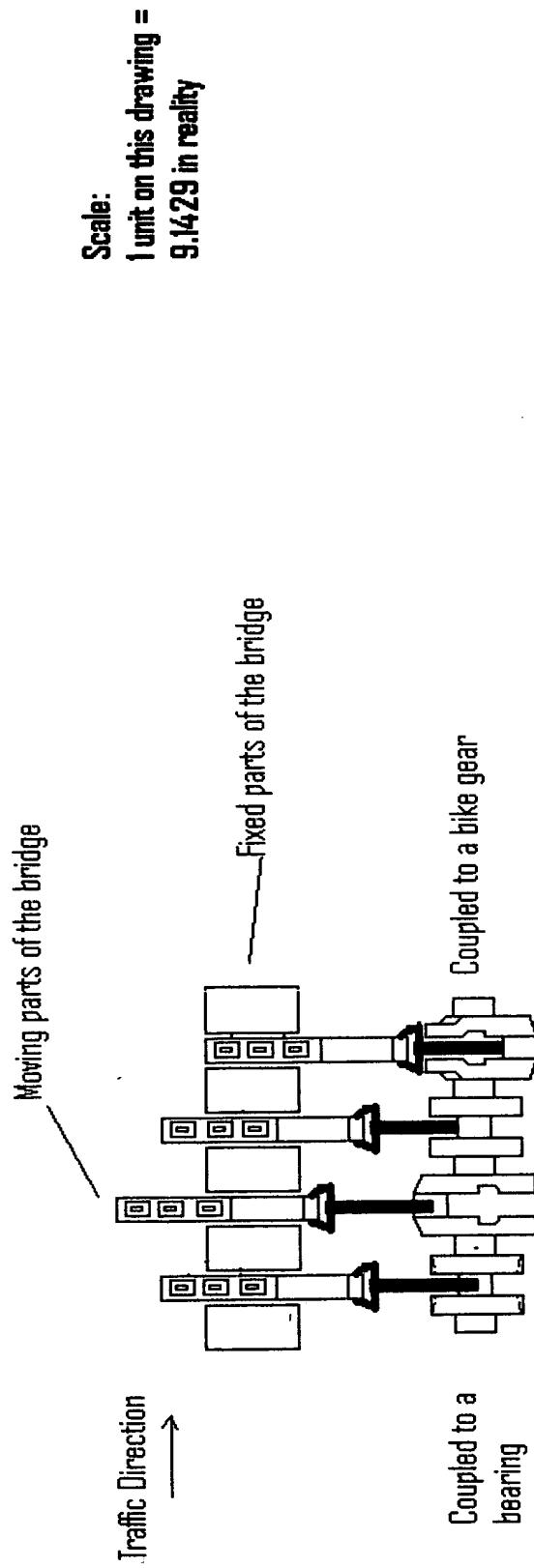


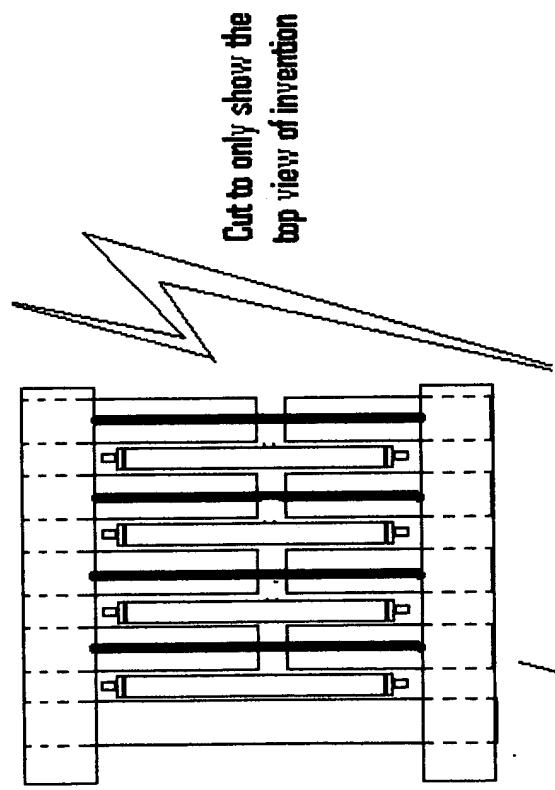
Figure 2: Side view of Figure 1, showing the functioning of the Bridge and the Gravitational Motor.



Notes:

- 1- The fixed parts of the bridge are held by a frame that is not shown on this drawing to ease understanding of the mechanism of the bridge.
- 2- The crankshaft is held by bearings at both side and is coupled to a bike gear that we used to deliver power to the flywheel.
- 3- In order to deliver the power from the crankshaft to the flywheel we used a chain but we could have used any other well known mechanical device.
- 4- I built a prototype of this size just to prove that it is possible to generate a rotation with the linear movement of things. In other words, for true applications on roads or at airports or anywhere else, the size and particularities of the prototype have to be recalculated.
- 5- This prototype is for very slow speed applications (and ideally, we can activate it with our hands also) and has been designed only to prove that it is possible to create a rotation with linear movement.
- 6- This prototype has been designed with a 4 cylinder crankshaft but we could have used anything else. It all depends on the application but the principle stays the same

Figure 3
Application # 10/711662
For: USPTO, By: Alain Painchaud
Member 109834 of OIQ, Quebec



Frame of the bridge with the moving parts in the middle

Notes:

- 1- The moving parts are guided in the middle by a guide and at extremities with rollers.
- 2- This is only a prototype and it is not intended for permanent generation of energy.
- 3- The road segments have not been designed for winter conditions but only to prove that it is possible to convert a linear movement into a rotation and ultimately into electrical energy.

Figure 4

Top view of the invention
Application # 10/71662

For USPTO, By: Alain Painchaud
Member of OIQ in Quebec, Canada, #109834

Scale:
1 unit of this drawing =
9.1429 in reality

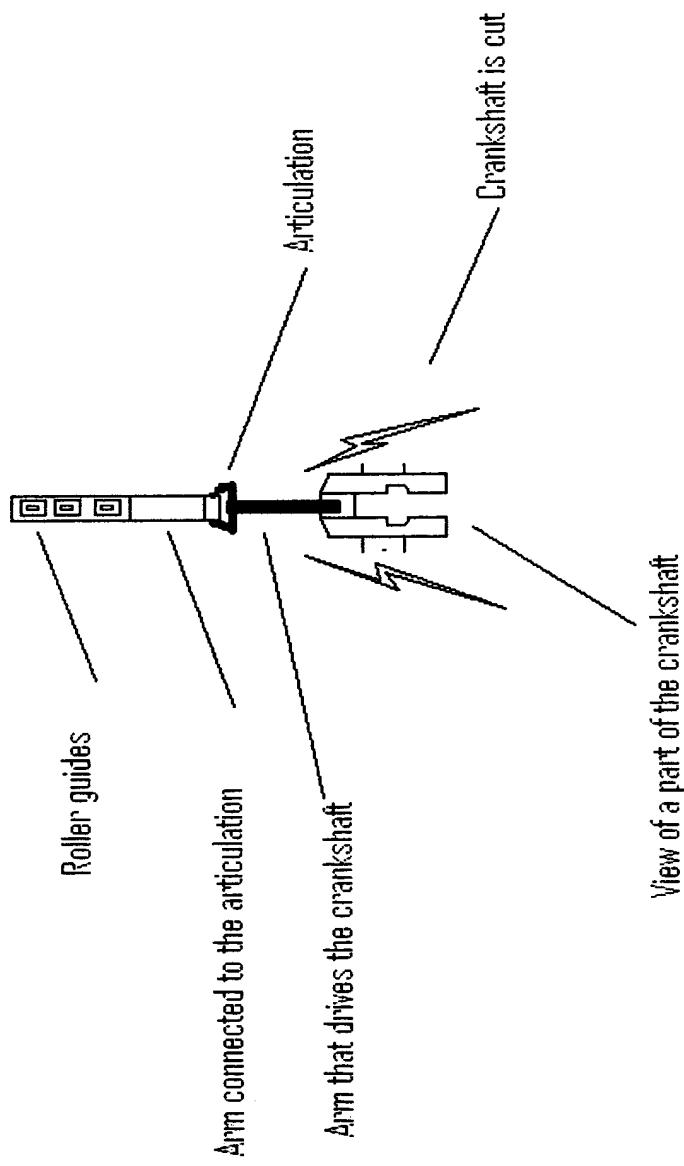
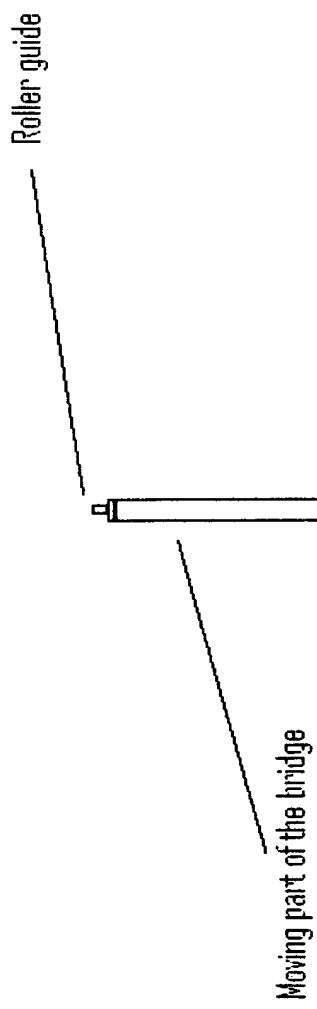


Figure 5
Application # 10/711662
For USPTO, by: Alain Painchaud
Member 1098834 of OIQ in Québec

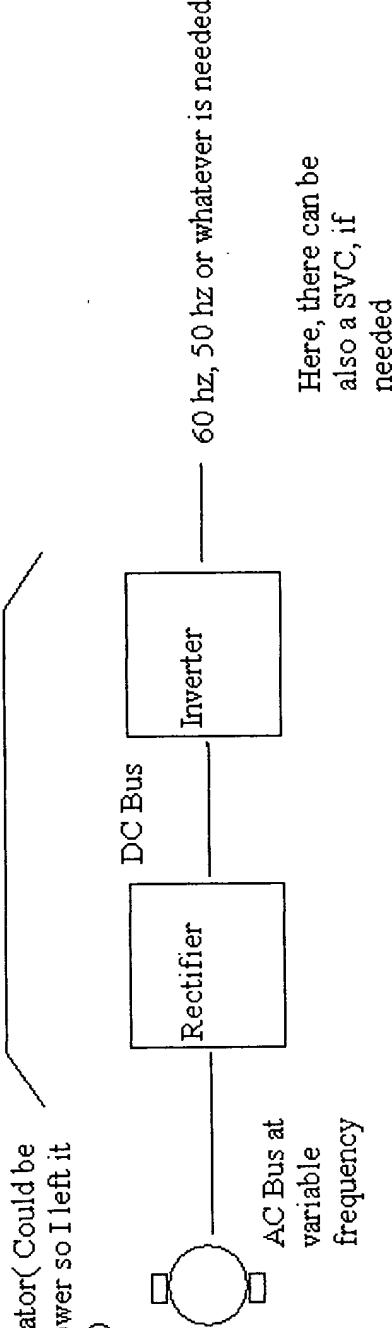


Scale:
1 unit of this drawing =
9.1429 in reality

Figure 6
Application # 10/71662
For USPTO, by Alain Painchaud
Member 109834 of OI in Québec

Back to back link (rectifier + inverter) to
cope for the frequency and power problem
before sending to utility electrical system

Generator(Could be
any power so I left it
blank)



Here, there can be
also a SVC, if
needed

Electrical Diagram 1
Application # 1071662
For: USPTO, By: Alain Painchaud
Member 109834 of OIQ Quebec



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Inventor Name: Alain Painchaud; Application # 10/711,662
Title of the Invention: Bridge converting movement into electricity
Replacement Sheet

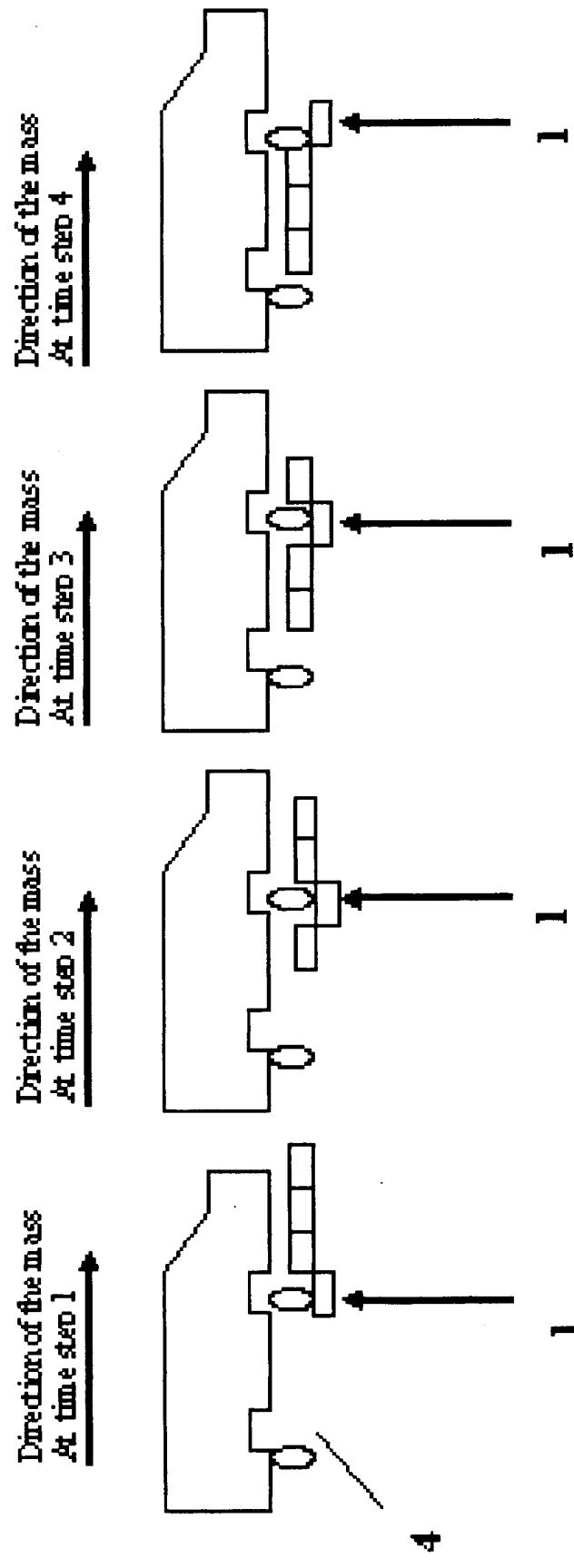


Fig. 1

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Invention Title: Bridge Converting Movement into Electricity
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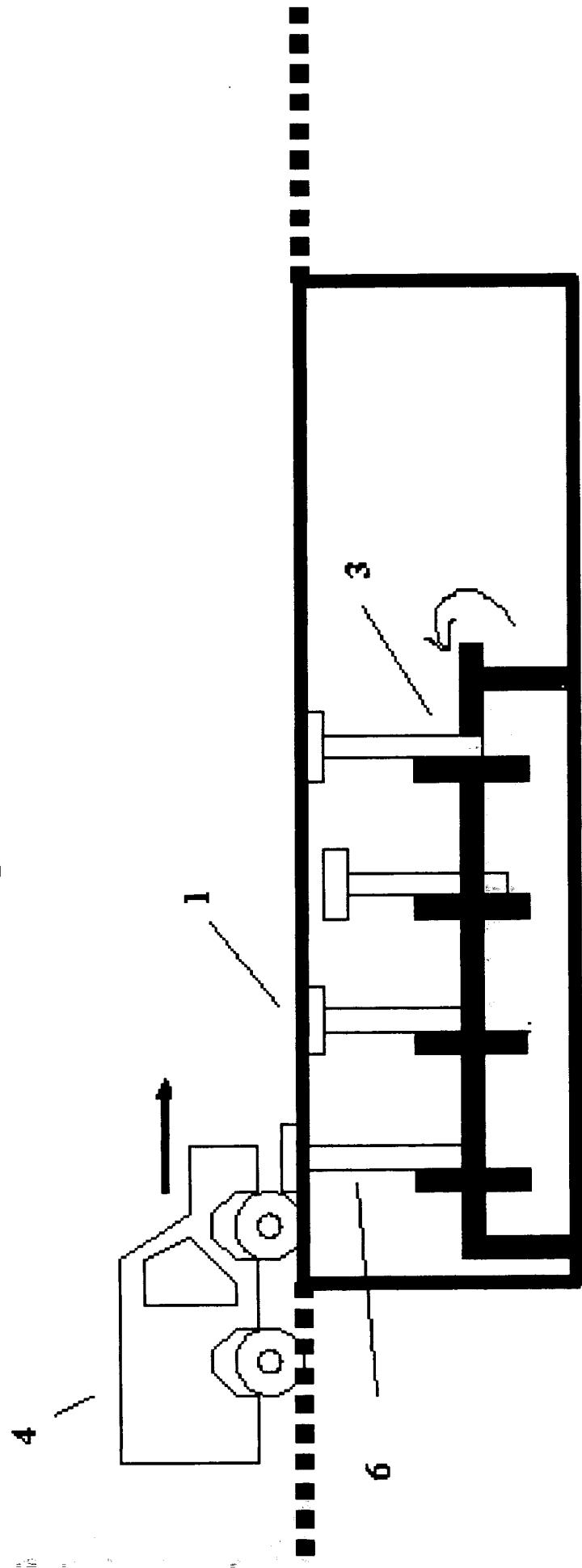


Fig. 2

Inventor Name: Alain Painchaud ; Application # 10/711,662
Invention Title: Bridge Converting Movement into Electricity

Replacement Sheet

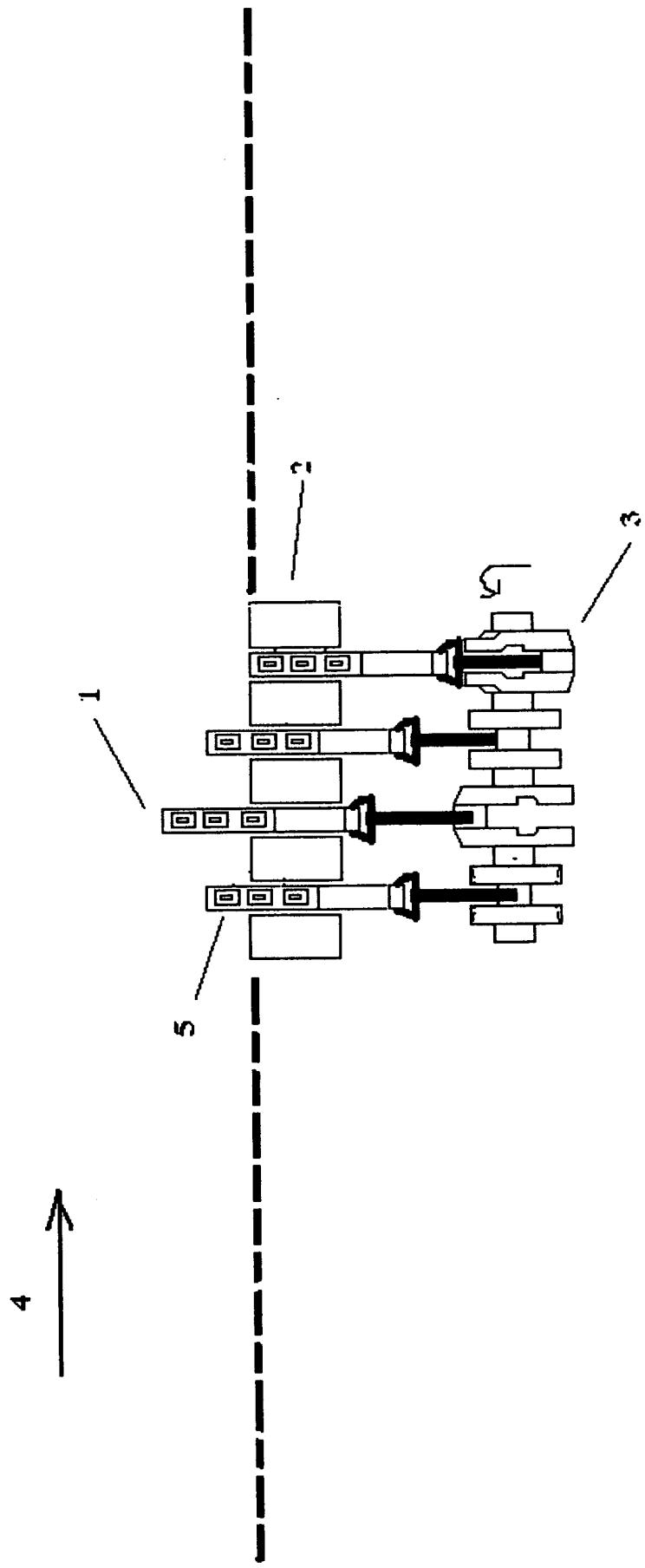


Fig. 3

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Invention Title: Bridge Converting Movement into Electricity

Replacement Sheet

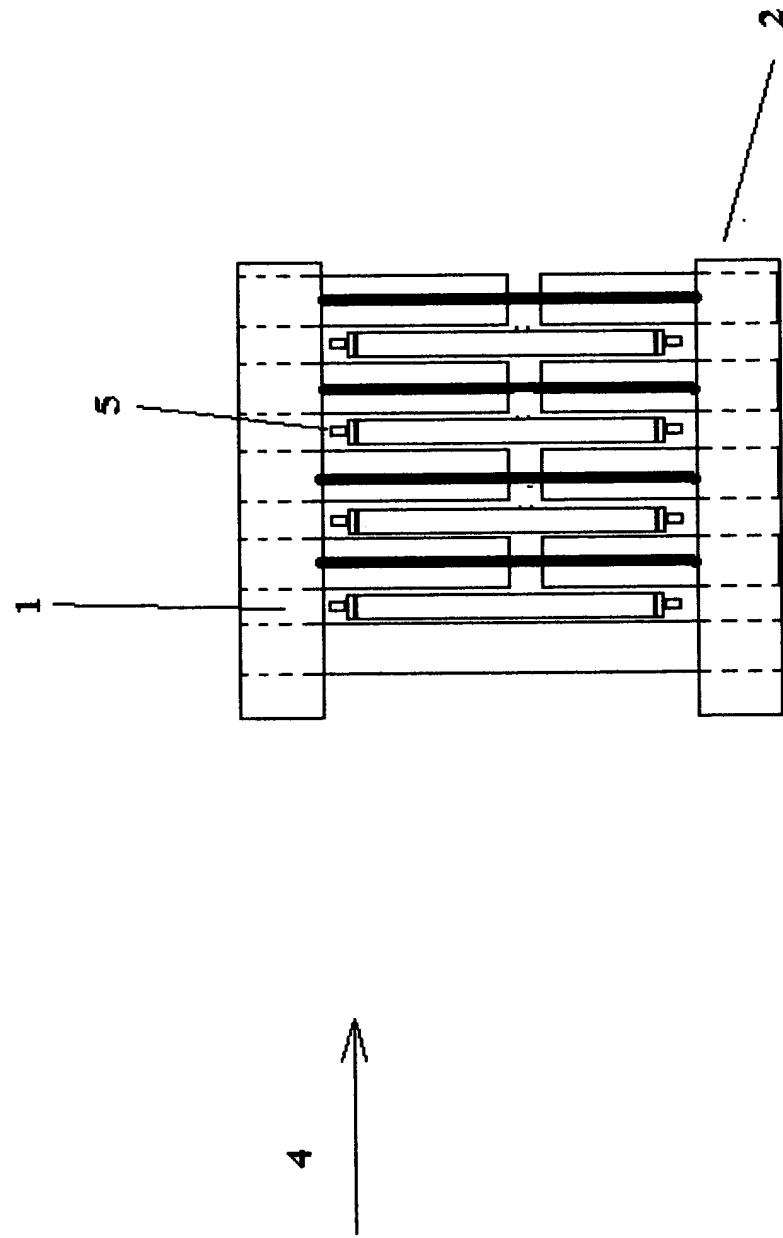


Fig. 4

Inventor Name: Alain Painchaud ; Application # 10/711,662
Invention Title: Bridge Converting Movement into Electricity

Replacement Sheet

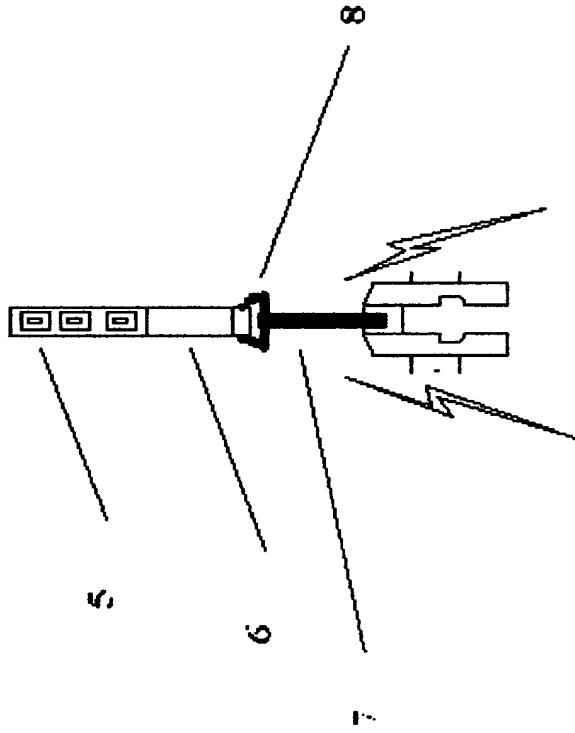
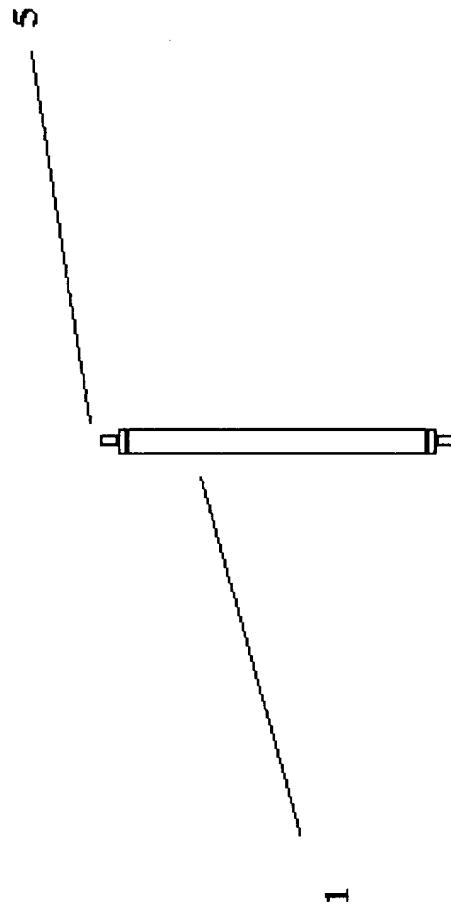


Fig. 5

Inventor Name: Alain Painchaud ; Application # 10/711,662
Invention Title: Bridge Converting Movement into Electricity

Replacement Sheet



1

Fig. 6

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Invention Title: Bridge Converting Movement into Electricity
Replacement Sheet

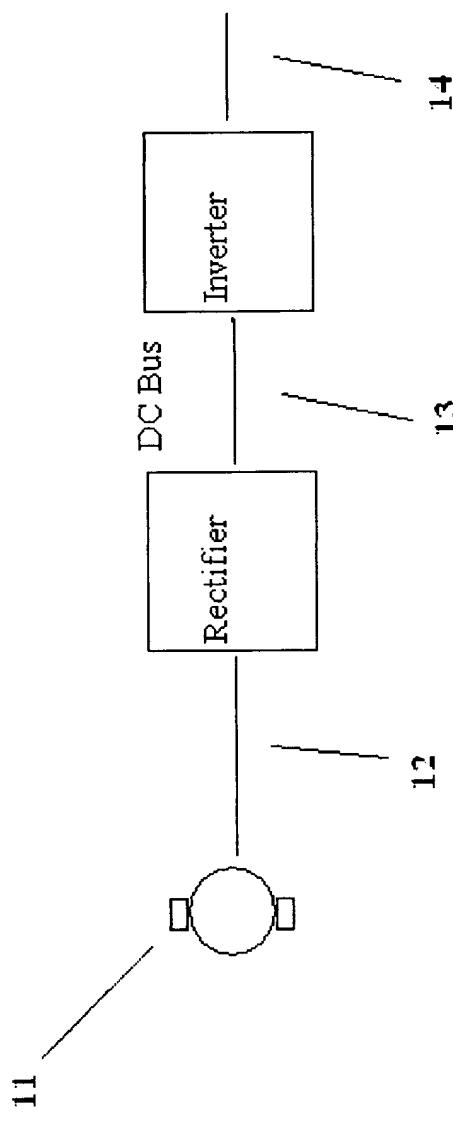


Fig. 7
Electrical Diagram 1



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DRAWINGS

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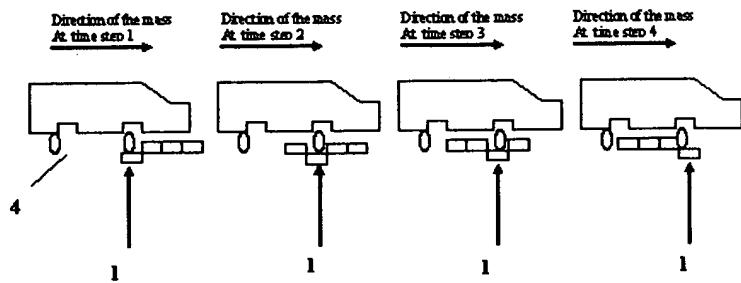


Fig. 1

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Invention Title: Bridge Converting Movement into Electricity
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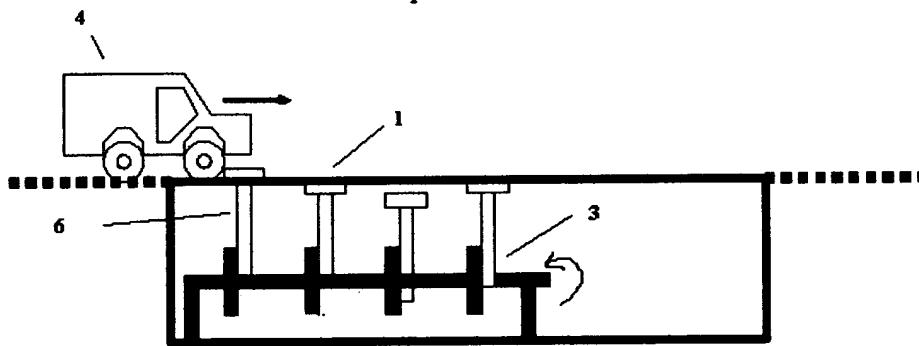


Fig. 2

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Invention Title: Bridge Converting Movement into Electricity

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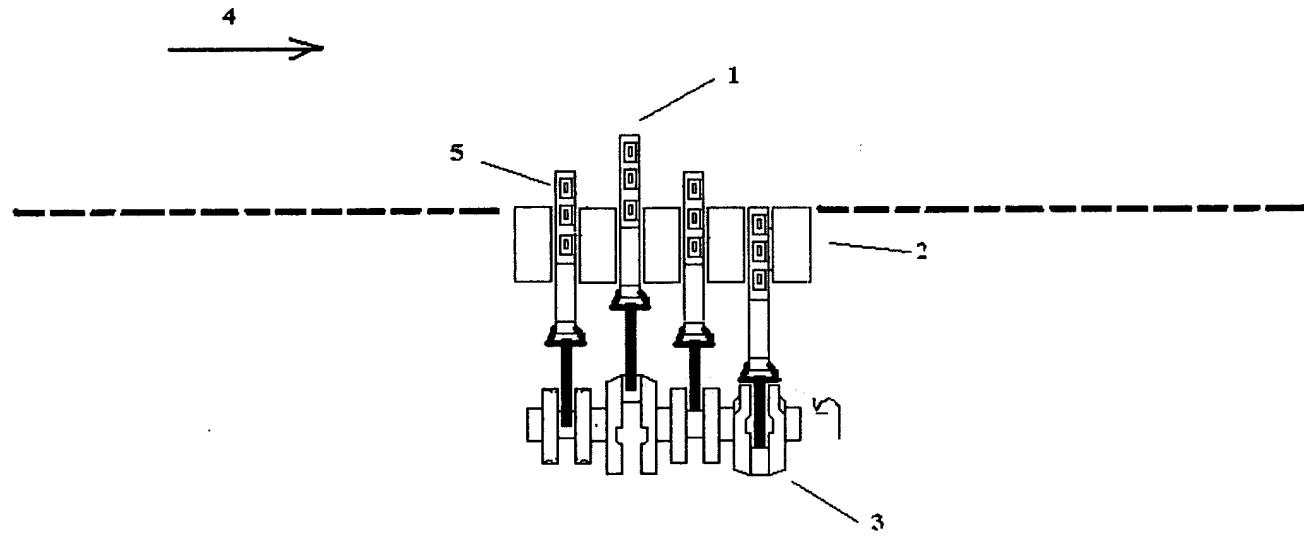


Fig. 3

Replacement Sheet

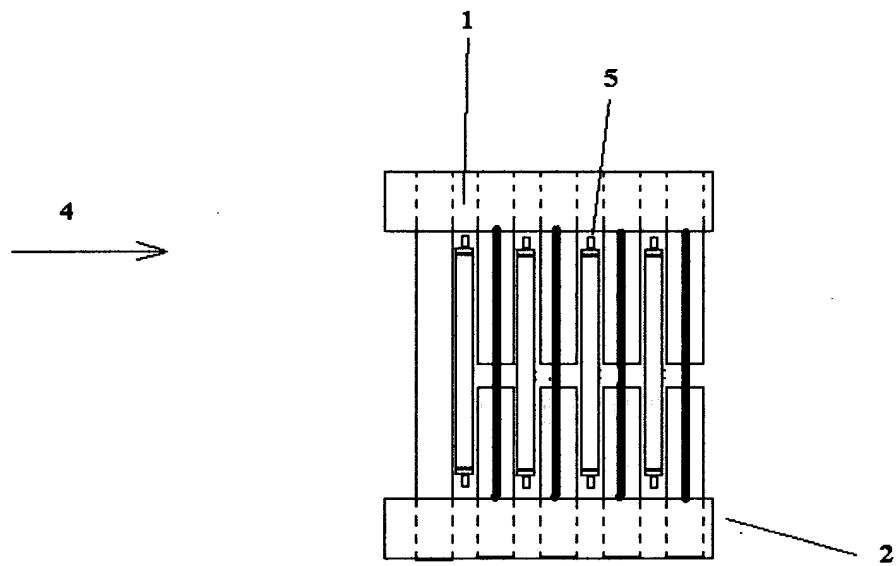


Fig. 4

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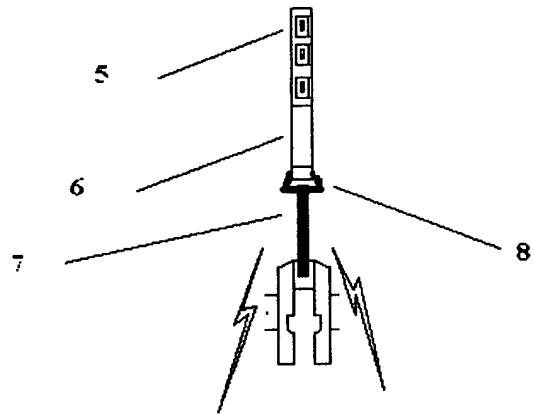


Fig. 5

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Invention Title: Bridge Converting Movement into Electricity

Replacement Sheet

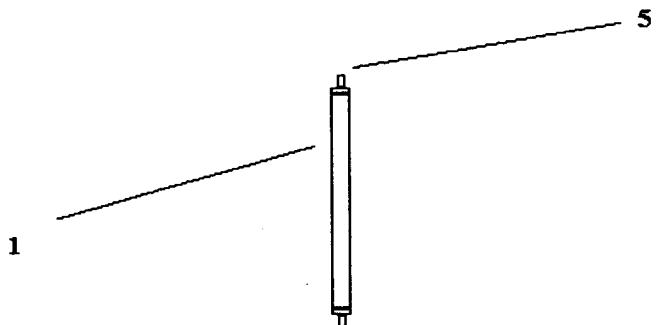


Fig. 6

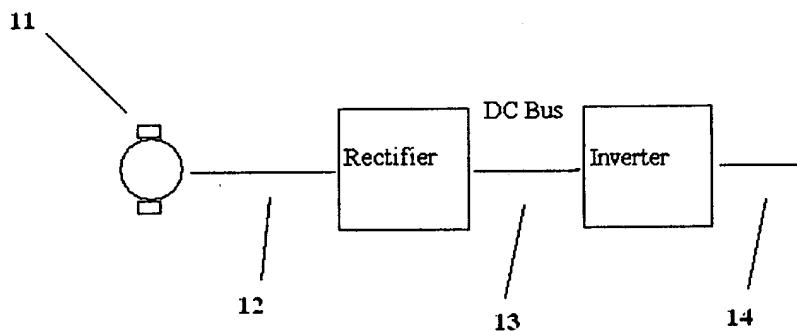


Fig. 7
Electrical Diagram 1

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